

REGION 6 EXECUTIVE SUMMARY

TOPIC: Bayou Corne

DATE: November 29, 2012

CONTACT: Ragan Broyles, Superfund

PURPOSE/ACTION NEEDED: For Information

DEADLINE DATE: n/a

BACKGROUND:

- June and July 2012: Assumption Parish government officials and state government investigate unexplained bubbling in Bayou Corne and Grand Bayou.
- August 2-3, 2012: An area of wooded swamp located in Bayou Corne began to subside.
- The area of concern is over the western flank of the Napoleonville salt dome in Assumption Parrish. The dome has aerial dimensions of approximately one mile by three miles and is used for a number of industry related activities, including gas storage caverns (both natural gas and liquefied petroleum gas (LPG) caverns) and brine mining wells. Brine mining wells are regulated under the UIC program by the Louisiana Department of Natural Resources (LDNR) as Class III injection wells. Oil and gas pipelines and salt water disposal wells are also located in areas near the dome.

CURRENT STATUS:

- EPA R6 conducted a subset of the air monitoring the Louisiana State Police had tasked Louisiana Department of Environmental Quality to conduct. The air monitoring was during the approximate 5 weeks of the drilling of the observation well. EPA conducted the air monitoring at 9 locations on the Texas Brine Facility. EPA monitored for:
 - Carbon Monoxide – CO
 - Hydrogen Sulfide – H₂S
 - Volatile Organic Compounds – VOCs
 - Explosive atmosphere, measured as percent of the lower explosive limit – LEL
 - Oxygen – O₂
- LDEQ is conducting air monitoring in the neighborhood as well as periodic in-home monitoring.
- Texas Brine and Assumption Parish are also maintaining air monitors in the area, both stationary points as well as with handheld instruments.
- Crude oil has been removed from the sinkhole as well as the salt cavern. DNR's contractor continues to monitor and remove debris and oil from the surface of the sinkhole
- Relief wells, called "geoprobes", are being installed in the shallow aquifers. This is allowing the gas to be flared under controlled conditions.
- At the request of LDNR, EPA's ASPECT flew over the sink hole area. ASPECT conducted chemical analysis, radiological surveys, and thermo-imaging. No issues identified by ASPECT.

ENVIRONMENTAL/PUBLIC HEALTH CONCERNS:

- Significant physical hazard.

TECHNICAL CONCERNS:

- Unstable geologic formation.

COMMUNITY CONCERNS: LDNR, State Police, and LDEQ have held multiple public availability sessions and post data on public websites. The next session is scheduled for mid-December.

